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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
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09/939,509

08/24/2001

Gregory P. Campau

1-23339

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7590

11/14/2006

MACMILLAN, SOBANSKI & TODD, LLC
ONE MARITIME PLAZA - FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604

EXAMINER

SCHWARTZ, CHRISTOPHER P

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|--------------------------------------|--|
| Office Action Summary | Application No. 09/939,509 | Applicant(s) CAMPAU ET AL. | |
| | Examiner Christopher P. Schwartz | Art Unit 3683 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20, 23-36, 39 and 41 is/are allowed.
- 6) ☒ Claim(s) 22, 36-38, 40, 42-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/23/06 has been entered.
2. Due to the numerous responses from applicants in this application applicants are requested to provide a marked up copy and a clean copy of the pending claims in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 22,36-38,40,42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Resch '099 in view of Leiber '514 and Steiner '730 or Steiner '713.

Regarding claims 22,36-38,40,42-47 Resch discloses a dual circuit brake system as readily apparent from the drawings. Resch discloses in column 17 lines 34-38 that the pump may be used as a "brake pressure source". Through regulation of the opening and closing times and pressures of the valves 106,138,142 it is readily apparent that the pump may in fact be used as the primary source for fluid pressure and the master cylinder as the auxiliary source.

Further, col. 17 lines 52+ Resch states "In the event the recirculating pump 127 is constructed as a self priming pump and a gradient present between the brake fluid reservoir 86 and the low pressure connection 136 of the recirculating pump 127 is sufficient for the operation of filling the pump chamber of the recirculating pump 127, an automatic triggering of the brake booster 17 is not necessary in order to execute automatically controlled braking on the rear axle...". Therefore, in the state of dynamics braking or ABS controlled braking the pump acts as the "normal source" for supplying fluid pressure and the master cylinder can act as the backup source. Further, around lines 60+ of col. 17 Resch states "...it is possible **in normal driver controlled braking to utilize the recirculating pump 127 of the rear axle brake circuit II as a brake pressure source...**".

Notwithstanding this argument the reference to Leiber '514 shows this more clearly and as discussed in column 3 around line 20.

The reference to Steiner '730 is relied upon for showing how the signals from the pedal sensor 71,74 and pressure sensor 76+ may be combined and evaluated “.. in terms of the expected value of a brake pressure or of a brake force which the driver wishes to achieve...”i.e. via control of the brake valves. **Re-read the the discussion in cols. 12 and col. 15.** Applicant's limitations of “blend control”, as broadly claimed, of the first and second signals are considered to be an equivalent to the multiple signal processing discussed in Steiner '730.

Note the separator units at 41-44 in Steiner '730 or at 24,26 in Steiner '713.

These units are considered to be an obvious alternative equivalent arrangement to the arrangement shown at 59,68 of Resch.

Because the brake systems of Resch and Steiner are so closely related the ordinary skilled worker in the art at the time of the invention would have found it obvious to have combined the teachings discussed above in such a way that they meet applicant's claimed limitations.

Response to Arguments

6. Applicant's arguments with respect to the above claims have been considered but are not persuasive. In response to applicants request as to which elements of the application are shown by Resch and which are shown by Leiber, the examiner was simply stating that, as broadly claimed, Resch could meet the claimed requirements of a “a normal fluid source supplying a first fluid” and “a backup source supplying a second

fluid" (claim 42) given the discussion in Resch in col. 17 (as pointed out above). But that given applicant's interpretation of using the pump as the "normal source" Leiber teaches this idea is known in a similar braking system and to have incorporated these teachings into Resch would have been obvious.

Likewise, the examiner is somewhat confused as to applicant's supposed confusion over the combination of references to Resch and either of the Steiner patents. Both of these patents are directed to nearly identical subject matter. Resch discloses an ABS dual circuit front-rear proportioning brake system which uses pedal displacement/force thresholds to control feel and actuation of the ABS system. With control from the control unit 22 the cylinder at 59 is primarily responsible for controlling the front-rear apportioning of the front and rear brake circuits. This system is similar to what Steiner '730 achieves as explained in column 2 lines 59-65, col 3 lines 8-16, col 9 lines 32-58 and col 12 lines 29-57 of the patent. Because these system are both directed to front-rear apportioning systems and use pedal force and/or displacement characteristics to put the systems into automatic braking mode, the interchangeability of equivalent component parts (such as the modulator 59,68 and valves in Resch for the buffer system 41-43 and valves of Steiner) should be fairly obvious.

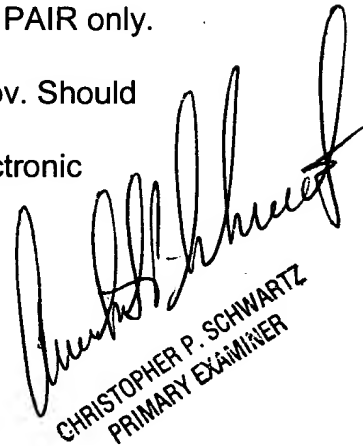
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cps
11/9/06



CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER